Propane Industry Offers Valuable Tips for Keeping Winter Energy Costs Down

Submitted by Propane Education & Research Council

Energy Saving Tips Consumers Should Pursue Now:

- Inspect and tune-up your residential heating system regularly. A heating system that runs well is more efficient and will save you money.
- Invest in a furnace thermostat timer that lowers your homes temperature when you are not at home. You can cut annual heating bills by as much as 10 percent per year by turning your thermostat back 10-15 percent for eight hours per day.
- Protect against drafts by caulking and weather-stripping around windows, doors and other openings such as ducts, fans, and vents.
- Install flow-restricting showerheads. You can reduce hot water usage by up to 50 percent without affecting shower pressure.
- Consider switching to a propane water heater. Over time, propane water heaters can cost up to one-third less to operate and they recover hot water twice as quickly as electric water heaters.
- Discuss payment plan options with your propane retailer. Many retailers have budget payment plans that will help you spread your projected annual cost of propane over many months, lowering the costs of seasonally higher bills.
- Change your furnace filter monthly. Clean filters will increase efficiency. If on a monthly payment plan, use receipt of your monthly propane bill as a reminder.
- Run washing machines, clothes dryers and dishwashers with a full load.
- Turn down your water heater from the standard 120 degrees to 115 degrees. You could save more than 10 % on your water heating bill
- Increase your water heaters efficiency by draining it every six months to remove mineral deposits and sediment.

Propane Gas Regulators

Propane gas regulators in general are very durable pieces of your propane system. And since they are able to automatically supply gas year in and year out, it's easy to take the regulators for granted. Lack of regulator inspection can be the cause of numerous accidents each year- accidents that in most cases could have been prevented.

Let's take a look at some simple, common sense inspection procedures that can lessen the likelihood on an LP-gas system causing injury or damage:

What is the main function of LP-gas regulators?

The principle purpose of a LP-gas regulator is to reduce the continuously fluctuating pressure in the piping system to a stable, lower pressure suitable for proper gas utilization appliance operation. Also provides overpressure protection to help prevent damage to gas utilization equipment controls. Most home propane systems are called a Two-stage vapor system. Typically the first-stage regulator (one on the propane tank) reduces the tank service pressure to between 5-10 psig. The second-stage regulator (one attached next to the house) reduces from 5-10 psig down to utilization applicance operating pressure of between 10-14 inches water column. Inches water column is a very low pressure measurement.

How long should a typical LP-gas regulator last?

This is a frequently asked question, and it's impossible to provide an accurate answer to it. There are just too many variables, things like climatic conditions, air pollution, abuse and even possible contaminates in the propane. These factors and others play a major role in determining the service life of a regulator. Most regulator manufacturers recommend a service life 15 years. Admittedly this is a rule-of-thumb recommendation, but industry shows the majority of regulator failures happen in regulators over 15 years old. Replacing older units is probably the biggest single step that can be taken in helping to reduce accidents associated with propane regulators.

Waiting until a regulator wears out and malfunctions before replacing it runs the risk of allowing an accident to take place and putting your family in harms way. At Heartland Co-op we encourage anyone with an outdated regulator to call us for a replacement.

Vent Blockages?

Regulators cannot work properly with a blocked or plugged vent. The vent is usually located on the underside portion of the regulator. Such a condition can cause over-pressure at the appliances, resulting in the possibility of a serious accident. This is why since 1974 UL's "Standard for Pressure Regulators for LP-Gas has called for regulator's vent to be of drip lip design. The drip lip design was applied to keep icicle formations from blocking the vent.

HEARTLAND CO-OP

S.A.F.E. Gas Customer Awareness

Safety Awareness in Family Environment for LP Gas

"S.A.F.E. Gas" Program

S.A.F.E. Gas (Safety Awareness in Family Environment for LP Gas) is a program designed to increase the customer awareness by providing sufficient safety and warning information to our customers so that they understand the following:

1. The properties and characteristics of propane.
2. The hazards and risks associated with the handling and use of propane.
3. The appropriate methods of safely using and handling odorized propane.
4. How their propane system at their home or business works.
5. What to do in the event of an emergency. Contacts and procedures.
6. The awareness of the regulations associated with their propane system.

Here at Heartland Co-op, your safety and the safety of your family is the utmost importance. We encourage that if you have any questions or problems that you call any of our HUB locations for help.

Alleman	**(515) 964-4850 or (866) 613-0094**
Belle Plaine	**(319) 444-2154 or (800) 328-2667**
Grundy Center	**(319) 824-5466 or (800) 319-7775**
Jewell	**(515) 827-5431 or (800) 728-0017**
Waukee	**(515) 987-4511 or (866) 616-8495**

We would like you to keep this newsletter for future references for your propane needs.

Safety.....It's up to you!

Safety.... It's up to you! Propane is a safe, reliable fuel. Like any other fuels, however, it is flammable. That means it can be dangerous if not handled properly. Remember, in order to protect you, your family, and others, you must be aware of (and respect) the normal, everyday hazards around you. Propane is no exception.

We have included important safety materials that you and your family should read and understand. If you, or any member of your household, cannot smell the distinctive propane odor from the scratch "n" sniff in the brochure enclosed, we recommend that you purchase a propane gas detector.

PROPANE
EXCEPTIONAL ENERGY®

The enclosed brochure **(Important Propane Safety Information)** will increase your understanding of how to use your propane system safely. Read it now and make certain your family and friends are familiar with the "If You Smell Gas" information.

NEW After hours Propane Emergency Number 1-888-588-7535

Please use this number ***ONLY*** if you are out of gas or have a propane leak that occurs either on a weekend, holiday or after 5:00 pm on a weekday. This is an emergency number ***ONLY*** and not for ordering LP Gas.

www.heartlandcoop.com

Propane Delivery Policy

Heartland Co-op is in business to serve our propane customers. Most of our home heating customers are on an Automatic Fuel Delivery. The Automatic Fuel Delivery allows us to deliver fuel in an efficient manner. Our propane price reflects scheduled deliveries. Heartland Co-op values your business and we are here to serve you. Should you have any questions regarding our delivery policy or your account, please feel free to contact us.

AUTOMATIC FUEL DELIVERY

Automatic Fuel Delivery customers will not be charged for a delivery/trip charge if you run out of gas. It is our responsibility to keep propane in your tank.

If you are not on our Automatic Fuel Delivery program and choose to call us when you need propane you must follow these guidelines or pay a delivery charge:

- 48 hours advance delivery notice (If order is made on Saturday or Sunday allow 48 hours starting Monday)
- Minimum delivery of 300 gallons

PROPANE DELIVERIES TO CUSTOMERS WITHOUT A CHARGE ACCOUNT

- Payment in office 48 hours prior to estimated delivery time or if arrangements are made at time of order, the payment can be left under tank hood with the following criteria:
  1. If the payment is not there when we attempt to make delivery (regardless of when we show up to make the delivery) we will not return and our LP relationship is severed. If Heartland Co-op owns the tank, we will make plans to pick it up.
  2. If a check was given as payment and it is bad (NSF), we will retrieve the propane from the tank, make arrangements to pick up the tank if it is a Heartland Co-op lease tank.
- Requests for delivery of propane without a 48 hour delivery notice, delivery on weekends or less than a 300 gallon delivery will pay a delivery/trip charge.
- We would encourage you to either pay ahead of time or to build a credit balance by putting a certain amount of money on your account each month to place towards your propane purchases, helping you better understand the costs of summer fill and winter heating.

Propane Properties and Characteristics

Propane (sometimes called LPG or LP-gas) in its natural state is a colorless, odorless vapor at normal ambient temperatures and atmospheric pressure. An odorizing compound is added to propane used for domestic or industrial fuel to enable it to be detected at very low concentrations in air. Detectable concentrations of odorized propane in air are well below those that will allow combustion. The odorant added is Ethyl Mercaptan; it gives it a distinctive gassy odor that can be detected.

While propane is used as a gas for fueling appliances, it is transported and stored as a liquid under high pressure in specially designed containers referred to either as tanks or cylinders. When liquid propane changes into a gas vapor, it expands in volume by 270 times, meaning the propane is very economical to store and transport as a liquid rather than as a vapor. However, this characteristic also means that even a small leak of liquid propane can result in a much larger quantity of propane vapor, which can be especially dangerous in a confined space.

Similar to any other flammable gas or liquids, propane is very safe when stored and handled properly. However, if propane is not properly and safely stored and handled, it can cause property damage, injuries or even death. For this reason, it is important for the safety of our employees that they have a thorough understanding of the properties and characteristics of propane, and the hazards and risks associated with its handling and storage, and are properly trained in the safe use and handling of propane.

Propane gas vapors are about 1 ½ times heavier than air, yet they mix easily with air. However, without moving air currents, propane gas settles down toward the lowest floor level until normal diffusion mixes it with air.

Propane is not toxic: however, as the gas takes the place of air, it becomes a simple asphyxiant and can cause suffocation from lack of oxygen. Liquid propane is lighter than water. It is about one-half as heavy as an equal volume of water.

Propane is normally transported as a liquid in pipelines or in specially designed pressure containers meeting the requirements of the U.S. Department of Transportation. Only containers specifically designed and approved for propane should be used to store and transport propane.

Propane Properties and Characteristics (con't)

Any source of ignition can cause a flammable propane mixture to ignite. Suspected leak areas and buildings should be evacuated immediately and all existing sources of open flames (pilot lights, matches, candles, lighters, cigarettes, cigars, pipes) extinguished if possible to do so without entering the area where a leak is suspected. The use of electrical switches, thermostats, fans, motors, flashlights, battery operated equipment, telephones and static electricity discharges can be a potential ignition source and should be avoided. If propane is supplied by an outside tank and no leak is suspected near the tank, then the tank service valve should be shut off to eliminate the propane supply.

Propane has a narrow range of flammability when compared with other petroleum products. In order to ignite, the propane/air mix must contain from 2.2 to 9.6 percent propane vapor. If the mixture contains less than 2.2 percent gas, it is too lean to burn. If it contains more than 9.6 percent, it is too rich to burn. Propane won't ignite when combined with air unless the source of ignition reaches at least 940 degrees Fahrenheit. In contrast, gasoline will ignite when the source of ignition reaches only 430 to 500 degrees Fahrenheit.

The odds of a person dying from a direct result of a propane transportation or storage accident involving loss of cargo are about the same as those getting struck by an airplane falling from the sky.

Propane is used by millions of people in many different environments-homes, industry, farming and more. More than 14 million families use propane to fuel their homes. Propane is used on 660,000 farms for irrigation pumps, grain dryers, standby generators, and other farm equipment. It is essential fuel for crop drying, flame cultivation, fruit ripening, space and water heating and food refrigeration.

Don't Get Caught

OUT OF GAS

You've learned to keep a close eye on your car's gas gauge. Running out of gasoline is not just an inconvenience. It could place you and your loved ones at risk. You watch the gauge and fill your tank to avoid being stranded. Watching the gauge change on your LP tank is just as important.

Did you know?

Many states have adopted the National Fire Protection Association's requirements regarding out-of-gas situations. These regulations require anyone delivering propane to an out-of-gas customer or new customer to perform a complete system check. This leak or safety check includes an inspection of all piping systems can take as long as an hour to complete and most dealers will charge an additional fee for this service. It may be inconvenient, but the propane customer is required to be home at the time of this inspection.

Why is this inspection necessary on out-of-gas calls?

Propane is an extremely safe energy source when used properly (these strict out-of-gas regulations were enacted by many states and the NFPA to protect your family and property). Convenience, comfort, cost and safety..... these are the four good reasons to avoid out-of-gas situations.

Liquid Level Gauge at 0%

We're here to help....

As your propane supplier we want to make sure that you always have all the heat you need and plenty of hot water. That means making sure that you never run out of propane. You can avoid the inconvenience and cost of an out-of-gas call. Tips for reading the percentage gauge (see figure included here) under the hood on your propane tank have been included. Look at the gauge attached to the tank with numbers from 5 to 95. (Don't be confused by the pressure scale with numbers from 0 to 300.) Numbers indicate the percentage of gas in the tank. Just remember to call us and have your tank filled before it reaches the 20 % level. Or better yet, ask us to place your account on an automatic fuel delivery basis. That way, we will make sure your propane tank is filled year-round.

Propane Gas Detectors

We think another good safety function is installing a propane gas detector(s) in your home. Propane gas detectors are designed to sound an alarm if they sense the presence of propane. Their operation does not depend on the concentration of odorant in the air, just the propane concentration at the detector. We recommend that you consider installing one or more propane gas detectors. This is important if you or others in your home have difficulty smelling propane, or if appliances are in little-used areas in your home where the smell of propane might not be detected. Detectors can provide an additional measure of security.

Just call one of our LP Hub locations, listed on the front page for more details.